

***NATIONAL WEATHER SERVICE INSTRUCTION 10-1606***

***March 8, 2006***

***Operations and Services  
Performance, NWSPD 10-16  
SERVICE ASSESSMENT***

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**SUMMARY OF REVISIONS:** This directive supersedes NWS Instruction 10-1606, "Service Assessments," dated July 8, 2004.

The following changes were made:

1. Scope and intent of the service assessment program is clarified.
2. Requirements for local and regional assessments activities are outlined.
3. Role of the Service Assessment Program Leader in the Office of Climate, Water, and Weather Services (OCWWS) is outlined and expanded.
4. Responsibility for National assessment team member selection is with OCWWS in consultation with the affected region(s).
5. Responsibility for writing the draft report is changed to OS52; team is responsible for providing facts, findings, recommendations, best practices, and appropriate supporting background information and for compiling the briefing presentation, but they are not tasked with writing the full assessment report.
6. Linkage to NOAA-wide assessments is provided.
7. Some sections were reworded and reorganized for clarity.
8. Guidance on releasing information outside of the Service Assessment Team is provided.
9. Distinction between recommendations made by the Service Assessment Team and actions that are to be tracked for implementation is introduced.
10. Guidance on the Decision Memorandum was deleted.
11. Team charter sample (Appendix B) and report format (Appendix C) for National Assessments are updated.
12. A template for Local or Regional Service Assessments is provided in Appendix A.
13. Flow chart for service assessment activities (Appendix D) is new.

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/signed/

February 22, 2006

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Dennis McCarthy  
Director, Office of Climate,  
Water, and Weather Services

Date

## Service Assessments

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1. Introduction. A service assessment is an evaluative learning tool designed to: (a) identify and share best-case operations, procedures, and practices, and (b) address service deficiencies. It is not intended to be a meteorological/hydrological study nor a catalog of

charts and tables detailing the history of an event. A service assessment evaluates the performance and services of NOAA's NWS offices affected by the event. A NOAA-wide assessment may evaluate the performance and services of other NOAA line offices as well as the NWS. This directive outlines the policies and procedures associated with Local, Regional, and National Service Assessments.

2. Mission Connection. Effective warning and forecast operations include processes that encourage and enable continuous improvement. This instruction outlines a systematic approach to service assessment and improvement with regard to the attributes of quality which are most important to NWS users, partners, employees, and management.

The service assessment program addresses the following:

- All stakeholders in the organization should have the opportunity to be involved – managers, staff, partners, and users. To ensure a systematic approach, clearly defined responsibilities and resources are needed.
- The Service Assessment Program is undertaken as an ongoing cycle, which is repeated with the occurrence of each significant event. As partner/user requirements and the service delivery environment changes, the NWS must respond with new ideas and new ways of working.
- The focus is on the key processes the NWS uses to meet the needs of its partners and users. For warning operations and services, these requirements are defined by the NWS Government Performance Results Act (GPRA) goals, as well as regional and local performance goals.

Service assessment is generally conducted internally at the field office level, allowing the NWS to constantly review its performance during significant events. The results of local and regional assessments should be coordinated with regional and national program managers to respond to identified gaps and/or improvement opportunities. Likewise, innovation and best-case practices should be shared to enable better service, streamlined processes, and recognition of outstanding performance across the organization.

3. Guidelines for Initiating a Service Assessment. When a significant event occurs, affected NWS offices should begin service assessment activities. (The NWS definitions for significant events are given in Appendix E.) The first step in this process is the issuance of a For the Record (FTR) Memorandum, as required by [NWSI 10-1603](#), "Significant Event Reporting." As part of this initial reporting requirement, preliminary information on services provided, performance measures, impacts, and customer response are documented. After the event has ended, local and/or regional management, as appropriate, should engage in a more comprehensive review of operations and services to share successes and address deficiencies. Appendix A provides a template for local and regional service assessment reports. It is based upon the FTR Memorandum, with lessons learned included at the end. NWS offices should coordinate with their Regional Headquarters or National Center Office Director to ascertain whether an event involving multiple offices warrants a Regional assessment.

The initiation of a National Service Assessment will be recommended by consensus of the OCWWS Director at NWS Headquarters; the National Service Assessment Program Leader in OCWWS; and the Regional Director(s) affected by the significant event. The Assistant Administrator (AA) for Weather Services will make the final determination regarding the initiation and scope of a national assessment. The format for a National service assessment report is in Appendix C.

All aspects of local and regional assessments, such as tracking and archiving of recommendations, closing actions, and sharing best practices will be governed by the local NWS or Regional Office. Local NWS offices and Regional Headquarters are encouraged to ask the National Service Assessment Program Leader in OCWWS for assistance with assessment activities.

The National Service Assessment Program Leader in OCWWS should be apprised of regional assessment activities, and Regional Headquarters Offices should be apprised of local assessment activities in their areas. This is to ensure effective coordination of best practices and efficient response to operational problems. In addition, a Regional Assessment may trigger the issuance of a National Assessment Report if the findings and recommendations are of a national scope. Routine coordination between Regional and OCWWS personnel will make this process as efficient and seamless as possible.

A National service assessment may be conducted if any of the following conditions apply to an event:

- a. Significant impact on the economy of a large area or population
- b. Significant number of fatalities
- c. Significant number of injuries requiring hospitalization
- d. Extensive national public interest or media coverage
- e. Unusual level of scrutiny of NWS operations (performance of systems, or adequacy of warnings, watches, and forecasts) by the media, emergency management community, or elected officials

3.1 Post-Storm Data Acquisition (PSDA) Quick Response Team (QRT). When extreme events occur (e.g., greater than F3 tornado), a PSDA report should be compiled in addition to service assessment activities. To gather the data necessary for accurate post-event analysis, the rapid deployment of a PSDA QRT may be required. For the guidelines and requirements for initiating PSDA QRT action, refer to [NWS Instruction 10-1604, Post-Storm Data Acquisition](#).

If an NWS service assessment team is convened, the PSDA QRT will provide ground and aerial survey information as an aid in the storm intensity rating process, if applicable. The PSDA report may be attached to or integrated into the service assessment report.

4. The Service Assessment Team. Service assessment teams will be formed by OCWWS in consultation with Regional Director(s) of the affected region(s). Team development is a highly collaborative process among appropriate Regional and Headquarters staff to ensure subject matter experts with strong team building and leadership skills are identified. Once the leader is selected, he/she will be asked to provide input on team membership. The AA approves the team leader and members. Logistical support for the assessment team is the responsibility of the affected region(s) with funding and programmatic support from OCWWS.

Service Assessments may involve other NOAA line offices. This will be determined before the team is formed and will be included in the team charter. The team charter will specifically state the objectives of the team. Member participation must be approved by the respective line office.

#### 4.1 Team Composition and Qualifications.

- a. Team Leader: The team leader will be from outside the affected region(s). He/she will have demonstrated leadership and project management skills and be impartial with respect to the assessment's objectives. Normally, the team leader is an NWS employee. In exceptional situations (e.g., when NWS leadership of the assessment team might be viewed as a conflict of interest), the team leader may be selected from within NOAA but outside the NWS.
- b. Team Members: The membership will include (1) a subject matter expert for the type of event in question; (2) at least one person with experience in field operations and current expertise related to the event; and (3) an OCWWS facilitator (to help coordinate the process and provide guidance for report format and content).

The Team may also include:

- a. A member from outside the NWS, preferably with expertise related to the event.
- b. A public affairs officer.
- c. Additional NWS members as needed, depending upon the magnitude of the event or workload.
- d. In a training capacity, less experienced individuals may be mentored by senior team members.

Service assessment teams should have a limited number of team members from affected regions as detailed below. As a guideline, there should be a maximum of:

- a. Two team members from the affected region for one-region events; and
- b. Three team members from the affected regions for multi-region events.

4.2 Team Charter. Each service assessment team will be provided with a charter unique to the event circumstances. The team charter is a written agreement defining what the service assessment team is expected to accomplish and how success will be measured. The purpose of the charter is to focus the team's work and establish the resources, scope, and timeline for the service assessment. A signed charter indicates the formal beginning of the service assessment project. National service assessment team charters are signed by the AA or his/her designee.

A sample charter is provided in Appendix B.

4.3 Team Authority and Responsibilities. A service assessment team documents and evaluates the effectiveness of those aspects of NWS performance relevant to the event. When evaluating performance and noting facts, findings, and recommendations, it is imperative to determine the overall level of NWS performance. This may include observation quality and availability; NCEP performance (numerical models); NCEP Service Centers guidance; statistical guidance (if appropriate); RFC models, guidance, and products and services; systems; communications; infrastructure issues; internal and external coordination; WFO products and services; dissemination; response; training; and management procedures. Only areas where service deficiencies or best practices are noted should be covered in the report.

4.3.1 Team Leader. The team leader is responsible for leading the team, keeping the team focused within the scope of the project, ensuring team expenses are within the given budget, briefing the Corporate Board, and coordinating activities with the National Service Assessment Program Leader in OCWWS. The team leader is the final authority on team activities and assessment input to OCWWS; however, the team leader will strive for team consensus. Release of preliminary information outside of the team will be limited to special situations. The team leader has the discretion to determine whether a special situation exists, and the release of information outside of the team will be made in consultation with the team members, if practical, and with the advice of public affairs, the AA, and the appropriate Regional Directors.

4.3.2 Team Members. Team members report to the team leader and devote full time to the team while onsite and until released by the team leader. Team members are also expected to restrict release of information to non-team members according to the consensus of the team and at the direction of the team leader.

5. Conducting the Service Assessment. The assessment process normally begins when early recovery efforts in the affected area are sufficiently advanced so team

members can interact with local officials, NWS personnel, and the media. This is typically within two to three days after an event but may range up to several weeks in the case of long duration events, such as river floods. The assessment may begin earlier if the team leader determines a need exists to survey damage before the clean-up process reaches a point where valuable information may be lost.

Note: Normally, a PSDA QRT will provide perishable data and information to the service assessment team. For more on the role of the PSDA QRT, please refer to Section 3.1.

The service assessment process requires a considerable level of support and coordination. This section describes the steps that should be taken to facilitate an effective service assessment. A flow chart summarizing the service assessment process is located in Appendix D.

## 5.1 Pre-Assessment Activities.

5.1.1 Itinerary and Logistics. The team leader will work with the affected region(s) and local NWS offices to develop the travel itinerary; the itinerary must be coordinated with OCWWS. In general, travel arrangements should be made by each team member through their local administrative support personnel; but all trip authorizations must be reviewed and initialed by the OCWWS budget office unless the team charter states otherwise. OCWWS and the affected region(s) will ensure that the necessary equipment (e.g., laptop computers with necessary software, NOAA/NWS magnetic car door signs, supporting forms and checklists, etc.) is available for use by the team.

5.1.2 Team Leader. The team leader should convene a meeting of team members to:

- a. Outline objectives and work procedures.
- b. Assign tasks.
- c. Create sub-teams, as necessary.
- d. Assess the need for an initial press conference and establish media strategies.

5.1.3 Local WFOs. After coordination with the team leader, the local WFOs should accomplish the following tasks, as needed:

- a. Make copies of all relevant public products, forecast discussions, and logs.
- b. Arrange interviews with local emergency management officials, media, elected officials, and cooperating agencies.
- c. Recommend suitable hotel accommodations.
- d. Arrange for meeting space.

- e. Refrain from releasing detailed information, such as probable maximum wind speeds or assessment of NWS services, until after coordination with team leader. In the case of tornadoes, see [NWSI 10-1604](#) for instructions on release of preliminary information.

5.2 On-site Assessment Activities. Team members gather information as assigned and report daily findings to the team leader. The team leader conducts meetings, as necessary, to:

- a. Assess progress.
- b. Modify or develop new assignments for the next day.
- c. Gather information for weekly status messages to coordinate with the National Service Assessment Program Leader in OCWWS.
- d. Identify information to be released.
- e. Assemble information for the OCWWS Performance Branch (see section 4.4.1).

5.3 Post-Assessment Activities. Team members will have responsibilities until the final report is released. They may be asked to review various sections of the report, assist in developing appropriate briefing materials, and conduct briefings.

5.3.1 Report Draft. The team leader will provide the following information and data to the Performance Branch within sixty days after the Assessment Team begins its duties.

1. **A brief summary of the important issues discovered.** This summary should include a brief meteorological synopsis of the event (something a non-meteorologist can understand), a chronology of the event and services provided, important statistics such as fatalities, damage amounts, rare meteorological statistics, verification scores, and background information leading to the findings and recommendations.
2. **Best Practices.** Innovative actions taken to accomplish the mission, which were successful and should be shared with other offices.
3. **Facts, Findings, and Recommendations.** Findings and recommendations should be supported by facts that provide appropriate background information. Facts may also stand alone. The findings and recommendations should be numbered and mapped to each other. (Definitions for facts, findings, and recommendations are given in Appendix C.)



4. **Draft Figures, Tables, and Images.** Those that may be needed for the final report to illustrate significant aspects of the event or provide background information related to facts, findings, and recommendations.
5. **List of Team Members.** Include their position and location, and any valuable contributors.

Based on the information provided by the Service Assessment Team, the Performance Branch will create a formal draft report following the format specified in Appendix C. This formal draft will be coordinated with the Team Leader to ensure the information is accurate and consistent with the team's findings and important facts are not lost in the transition. The draft is then distributed to the Corporate Board, WSH offices, affected WFOs, and appropriate Centers of the NCEP for review at least one week before the scheduled briefing to the Corporate Board. The report will be clearly marked "FOIA Exempt - Not for Public release" on the cover and "Draft" on each page. All personnel will take reasonable precautions with the report and associated materials to prevent premature release of information.

The briefing to the Corporate Board will occur approximately one week after the draft report is sent for review. Suggested changes to the report (in a written format) are due two weeks after the briefing.

Before the report is finalized, OCWWS will coordinate with the Corporate Board to determine which recommendations will be accepted as actions. Final determination as to the assignment of actions is under the purview of the AA. Actions will be tracked to completion, and recommendations and best practices will be distributed and archived only.

**5.3.2 Briefing for the Corporate Board.** The Corporate Board will be briefed by the team leader on the findings and recommendations for all service assessments unless otherwise indicated by the AA. Other team members may accompany the leader to represent specialized or technical areas of the assessment. In addition to the Corporate Board, the briefing should be attended by the following:

- a. NOAA Legislative Affairs.
- b. NOAA General Counsel.
- c. NOAA Public Affairs.
- d. NCEP Service Center Director(s) as appropriate, or designees, at discretion of the NCEP Director.
- e. Affected MIC/HIC(s) as appropriate, at discretion of the regional director(s).
- f. NWS Employees Organization Representative.
- g. Others (as determined by AA/OCWWS).

The team leader will present the briefing, focusing on the team's findings and recommendations. Questions and comments presented at the briefing will be only for clarification. Regions, National Centers, and Headquarters Offices potentially affected

by the team's recommendation(s) should provide a statement or proposal as to whether or not the recommendation(s) should be accepted as an action(s). All suggested changes in the report, including the identification of recommendations and actions, should be included in the written comments given to OCWWS prior to or within two weeks after the briefing (see section 5.3.3).

**5.3.3 Finalizing the Service Assessment Report.** Two weeks after the briefing to the Corporate Board, OCWWS will begin the process of finalizing the report for release and publication. Suggestions for revision submitted prior to or after the briefing will be addressed and coordinated with the Team Leader by OCWWS. Recommendations identified as required actions by the Corporate Board and OCWWS Director will be noted. The report should be finalized within four weeks after the briefing. It is then submitted to the AA for signature. The final report will not be released until it is signed.

**5.3.4 Coordination and Dissemination of Service Assessment Final Report.** NOAA Public Affairs, NOAA Legislative Affairs, the team leader, OCWWS, and the appropriate regions will determine what briefings are required in coordination with the release of the report. Once the delivery date of the report is known:

- a. NOAA Legislative Affairs (NWS) will work with the team leader, OCWWS and the appropriate region(s) to arrange briefings for appropriate members of Congress. If a briefing is not necessary, appropriate faxes announcing release of the report and a contact for additional information will be sent to appropriate members of Congress. The briefing or faxes will normally occur the day before release of the report to the general public.
- b. NOAA Public Affairs (NWS) will work with the team leader, OCWWS and the appropriate region(s) to arrange for media briefings. If a briefing is unnecessary, appropriate press release(s) will be issued. The briefing or press release will normally occur after Congressional notification.
- c. At least two days before release of the service assessment report, the NOAA Administrator will be notified (memorandum or briefing).

**5.3.4.1 Release Briefing.** This normally will occur when findings reveal significant issues or problems about which the NOAA Administrator should be aware. On the official release date, the report will be made available on the NWS, OCWWS, regional office, and local office(s) Internet home pages, as appropriate. Printed reports distributed before the official release of the report will have a sticker attached to the front cover titled "FOIA Exempt - Not for Public Release until ...." The date on the sticker will reflect the official release date. OCWWS will be responsible for funding and printing of service assessment reports. OCWWS will also fund costs connected with media, Congressional, and NOAA briefings.

**5.3.5 Resolution of Actions and Recommendations.** Authority for the assignment and dispensation of actions is under the purview of the AA. The Regional Directors and

Office Directors will assign the report actions to the appropriate NWS office(s). Action assignments and expected closeout dates will be coordinated with the National Service Assessment Program Leader in OCWWS for tracking purposes. Offices with open actions will provide monthly progress reports to OCWWS, as appropriate, through their Region on their progress toward task completion. Actions that are being addressed but are not yet complete will be designated as “In Progress.” Updates on these items may be less frequent depending on the projected completion date.

Recommendations from service assessments that do not become actions should be submitted into the Operations and Services Improvement Process (OSIP) when appropriate as they represent objective and often creative ideas for improving NWS performance. OCWWS will distribute recommendations and best practices periodically, as appropriate, to promote service improvement.

**5.3.5.1 Service Assessment Report Database.** OCWWS tracks all on-going service assessments and maintains a database to monitor progress. The database includes:

- a. Event name;
- b. Event date(s);
- c. Assessment start date;
- d. Due date
- e. Projected submission date (if extension required);
- f. Current status of the assessment;
- g. Date signed by the AA.

**5.3.5.2 Action Tracking and Reporting.** OCWWS and the regions will track actions and maintain a database of actions, recommendations, and best practices from all service assessment reports. OCWWS and the regions will ensure the information contained in their respective databases is consistent and up-to-date. For each service assessment, the database will include:

- a. Event name;
- b. Event date(s);
- c. Action number;
- d. Action status (open, in progress, or closed);
- e. Action due date;
- f. Projected completion date (if due date is not met);
- g. Recommendations;
- h. Best Practices;
- i. Comments (i.e., latest progress, final action, or reason the due date was not met).

## **APPENDIX A – Guidelines for Local and Regional Service Assessments**

The following template is given as a recommended practice for compiling local and regional service assessment reports.

**Executive Summary** – An executive summary is written for someone who does not want to read the whole report but wants the important “bottom line” information.

**Event Overview** – A brief description of the event – what occurred, when and where. Avoid using technical jargon.

**Service Provided** – A summary of products issued, lead time, and any non-routine means of notification to public or partners.

**Systems** – Highlight any significant benefits or deficiencies related to the event forecasting or product dissemination (radar, satellite, software, NWR/EAS, models, forecast tools, etc.)

**Staffing** – Describe impacts of the event on the shift (situational awareness, workload issues – additional staff called in, etc.)

**Impacts** – Quantitative or qualitative information that illustrates the impact of the event on local/regional users, partners, and staff, as appropriate. This may include: highest/lowest observed meteorological parameters, fatalities/injuries, disruption of services, economic impacts, or losses etc.

**Summary of Customer Interaction and User Feedback** – Emergency management actions, media coverage, feedback from local or state officials or other users.

**Lessons Learned** – Successes and deficiencies identified, changes recommended, specific actions taken (or planned) as a result of the event (e.g., case study compiled, award presented, spotter network expanded, etc.)

## **APPENDIX B – Sample National Service Assessment Team Charter**

**Purpose:** On August 29, 2005, the eye of Hurricane Katrina moved onshore along the southeastern Louisiana and southern Mississippi coast causing numerous fatalities and widespread significant damage. Katrina peaked as a rare category 5 on the Saffir-Simpson scale in the central Gulf of Mexico and weakened slightly to a strong category 4 before moving onshore. This team is tasked with documenting and evaluating the effectiveness of NWS services and operational procedures relating to the agency's performance with respect to this event.

**Expected Outcomes/Activities:** The assessment team should identify best-case operations, procedures, and practices; and make recommendations to address service deficiencies. Their report should contain the key facts surrounding the event and focus on the offices and entities most significantly impacted by Hurricane Katrina on or around August 29, 2005. The team should thoroughly evaluate important issues as they uncover them during the assessment. For this event, the main concerns appear to be with following issues, and they should be examined:

1. WFO/RFC/NDBC back-up, continuity of operations procedures/plans, resource management
2. NWS coordination and collaboration with emergency managers and decision makers
3. Accuracy of storm surge forecast
4. Hurricane track forecast and lead time for evacuation response

**Scope of Authority/Limitations:** The team has the authority to:

- Obtain and use all products, logs, etc. produced by offices significantly impacted (e.g., WFOs, NCEPs, SRH).
- Interview any employees including training providers (e.g., Warning Decision Training Branch) in the NWS it deems necessary to accomplish its mission.
- Make recommendations for improving NWS services and operations. Recommendations will be vetted through the Corporate Board; then OCWWS will determine which recommendations will become actions.
- The team must stay below \$\_\_\_\_\_ in total expenses.

Teams should employ the most efficient methods for gathering information (i.e., telephone interviews, video teleconferencing, travel, etc.). Trip authorizations must be reviewed and initialed by the budget office in OCWWS. To expedite the process for travel, trip authorizations should be generated by the local office supporting the traveler, and faxed to the Performance Branch (301-713-1598) for coordination and approval in OCWWS.

**Time Frame:** Team activities should be prioritized based upon the issues that most significantly and directly influenced NWS performance during the event. The assessment should be focused and concise.

Begin Date:

Ending Date:

Briefing Date:

**Communication Requirements:**

- Team leader should report progress of the team in weekly messages to the Director of the affected Region, OCWWS Director, Performance Branch Chief, and National Service Assessment Program Leader. This report should contain, travel itineraries, list of people interviewed, and a brief description of important findings, recommendations, and/or issues.
- Team leader should conduct meetings as necessary to assess the team's progress, modify or develop new assignments for the day, and address issues regarding the release of information.
- Team leader will provide a briefing on the team's findings and recommendations to the Corporate Board.
- The team leader and members may be asked to review the report before it is finalized by OCWWS.

**Members:** Team members have been selected based upon their expertise, experience, and potential for contributing significantly to a constructive and thorough service assessment. The team should make use of subject matter experts to answer questions regarding policy, technological capabilities (e.g., software, communications, dissemination, etc.), training options, or other issues as they arise. It is not necessary for these "consultants" to be members of the team.

The team leader is responsible for engaging the collaboration that will lead to the success of the team. The role of the team leader includes:

- Keeping the purpose, goals, and approach of the team relevant and meaningful.
- Building commitment and confidence in team members.
- Utilizing the skills and expertise within in the team through task delegation and cooperation.
- Managing feedback from outside of the team and soliciting advice/input from outside of the team when needed.
- Working closely with the National Service Assessment Program Leader to ensure the process is efficient and the results are timely and effective.

All members of the team can provide leadership in the achievement of the assessment team objectives and should assume personal accountability for the success of the team.

The role of each team member includes:

- Communicating with the team in an open and courteous manner.
- Providing support, suggestion, opinion, and information toward the objectives of the team.
- Encouraging creativity and innovation among fellow team members.

## **APPENDIX C – National Service Assessment Report Format**

1. Service Assessment Report. The report will be written by the Performance Branch based upon the information provided by the team and in consultation with the team leader. Below are some general guidelines the report format will adhere to; however, each assessment is unique, and the format may be adapted if necessary. The service assessment report is a comprehensive, formal document that contains information concerning:

- a. The nature, intensity, and impact of the event.
- b. The performance of the NWS offices most affected prior to and during the event, focusing on the full range of products and services. The team and OCWWS will determine which offices are to be included in the report.
- c. The response to NWS warnings and forecasts by those affected by the event.
- d. A concise summary of the most relevant facts, findings, and recommendations as defined in section 2.4 of this Appendix.

The report will contain information with supporting evidence. Editorial comments will not be included; however, brief comments, such as “the team found NWS performance to be excellent,” or “several service issues were identified and are detailed in the Facts, Findings, and Recommendations section,” are permitted. Draft materials for service assessments are pre-decisional documents. All draft materials will be marked "FOIA Exempt - Not for Public Release." (FOIA refers to the Freedom of Information Act.) Also, every page of all draft documents will include "Draft" as a watermark that is prominently visible across the page.

Final National Service Assessment Reports can be viewed at:

<http://www.nws.noaa.gov/om/assessments/index.shtml>

2. Service Assessment Report Composition. Service assessment reports will contain facts, findings, recommendations, and actions,\* an executive summary, and supporting information, as required. The format should include the following:

- a. Cover
- b. Title Page
- c. Preface
- d. Table of Contents
- e. Explanation of Acronyms
- f. Service Assessment Team Members
- g. Executive Summary
- h. Service Assessment Summary (Facts, Findings, Recommendations, and Actions)
- i. Best Practices

The report may include information on the following areas if they are determined to be the most important issues of an event. Each area is not required to be covered in the report.

- Observations
- NCEP Guidance, Products, and Services
- Statistical Guidance (if appropriate)
- RFC Models, Guidance (if appropriate), products and services
- Local Office Warning and Forecast Service
- Systems
- Communications and Infrastructure Issues
- Internal and External Coordination
- Dissemination
- Response
- Training
- Management Procedures
- Supporting Activities (if appropriate)
- Appendices
- Definition of F-Scale and/or Saffir-Simpson Scale (if appropriate)
- Post-Storm Data Acquisition Analysis Map
- Narrative Summary
- Other (if appropriate)

Information on report content is given in the next several subsections.

\* The team does not have the authority to assign actions; actions will be derived through OCWWS' coordination with the Corporate Board based upon the recommendations made by the team.

2.1. Preface. The preface is a preliminary statement or essay written by the NWS AA introducing the report, explaining its scope, intentions, or background. The preface should establish the vision for the report, and provide the reader with a sense of why they should be interested in this report.

2.2 Executive Summary. The executive summary is a self-contained, stand-alone document which provides a very condensed version of the service assessment report. It is designed for readers that do not intend to read the entire report. Executive summaries should not be longer than 10% of the original document; for an average service assessment report, it should be one to three pages. Key facts, findings, and recommendations should be highlighted, and the summary should end with a conclusion consistent with that of the larger main report.

2.3 Service Assessment Summary. The summary concisely describes activities before and during the event to give a clear understanding of what occurred. It should be well-written and exclude jargon and technical language. When a person has finished



reading the summary, he/she should have a good understanding of the event and the NWS response. It should provide an overview of the impact of the event, highlight NWS effectiveness in warning and forecasting the event, note significant NWS accomplishments, and/or shortcomings, detail the need for immediate actions, and discuss public response to the event, including feedback from local officials, emergency managers, the public, and the media. The nature and complexity of each event will dictate the length of the summary, but five pages should normally suffice.

2.4 Facts, Findings, Recommendations, and Actions. The report will contain facts, findings, recommendations, and actions. They are defined as:

**Fact** – A statement that describes something important learned from the assessment for which no action is necessary. Facts are not numbered but often lead to recommendations.

Example:

**Fact:** During the event, WFO Cleveland issued 24 severe thunderstorm warnings, with an average lead time of 22 minutes.

**Finding**– A statement that describes something important learned from the assessment for which an action may be necessary. Findings are numbered in ascending order and are associated with a specific recommendation or action.

Example:

**Finding 1: The team discovered many users of WFO XYZ and WFO ABC Internet sites had trouble finding specific information because the sites were arranged in different formats.**

Findings should provide a clear understanding of the issue. Avoid unnecessary details, unrelated information, editorializing, and repetition.

Poor Example: “Outlooks were generally consistent in timing.”

Good Example: “Except for the first one, outlooks were consistent in timing.”

**Recommendation** – A specific course of action, which should improve NWS operations and services, based on an associated finding. Not all recommendations may be achievable, but they are important to document. If the affected office(s) and OCWWS determine a recommendation will improve NWS operations and/or services, and it is achievable, the recommendation will likely become an action. Each recommendation is numbered and assigned the same number as the associated finding. Recommendations should be clear, specific, and measurable.

**Action** – Actions should be clear, specific, measurable, achievable, and improve NWS operations and services. Each action is numbered and will be linked to its associated finding. Actions are tracked at the national level, and their completion is required. Teams are not responsible for determining which recommendations become actions.

Example:

**Recommendation 1: The NWS should have standard formats for all Internet sites so that users can find the same product from different offices in consistent locations on the sites.**

**Action 1: The office of the Chief Information Officer will develop a standard format for all NWS Internet sites to use. The CIO expects to complete this by December 31, 2005.**

Each action should detail the requirements to be addressed and must be linked to the associated finding. No other information or statements should be included.

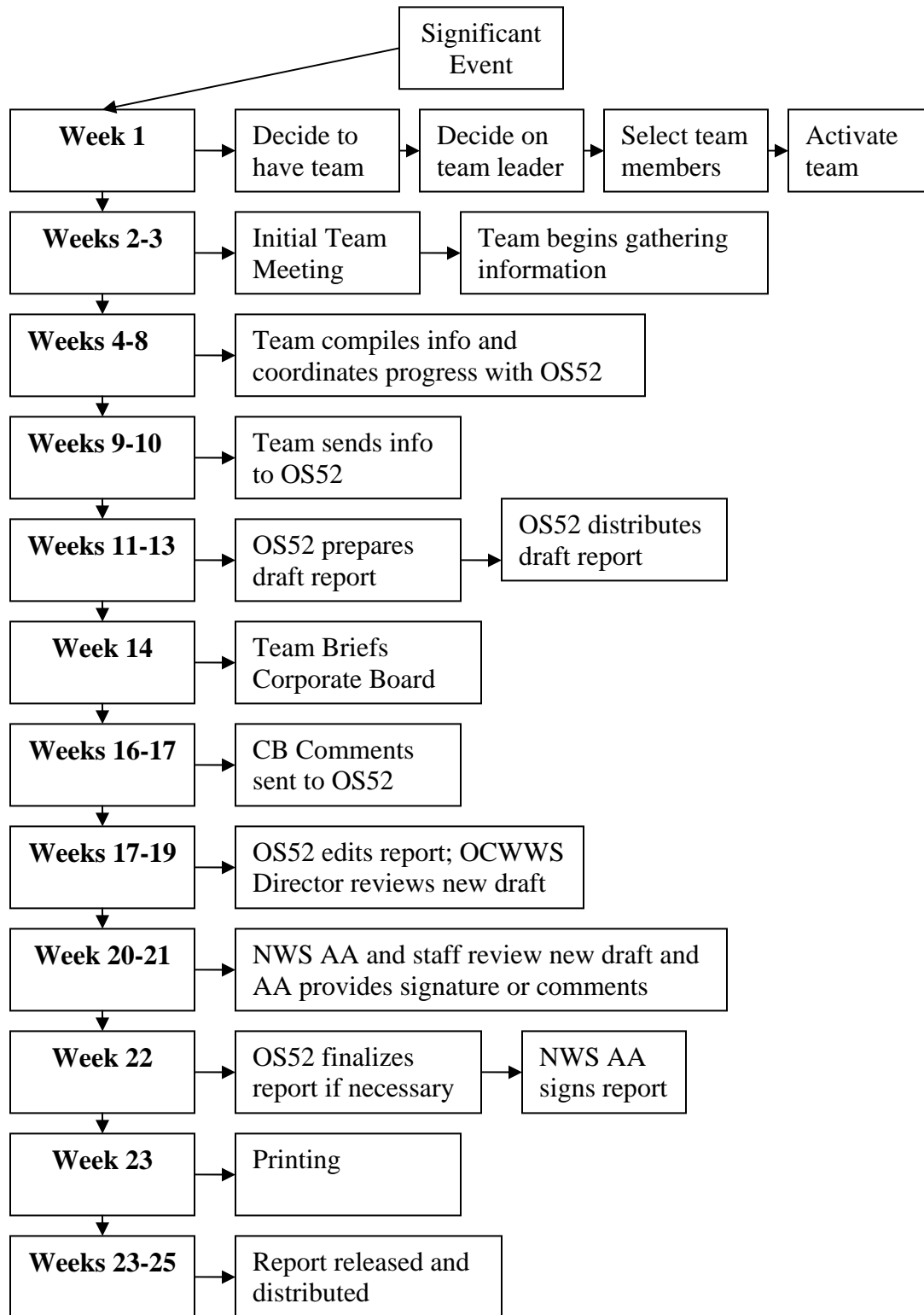
Guidelines for writing actions and recommendations are:

- a. Be specific and recommend close-ended actions. For example, avoid recommendations such as, “WFO River City should continue to work with emergency managers to publicize the value of NOAA Weather Radio.”
- b. Use a minimum number of words. Avoid adjectives when possible and the use of adverbs (i.e., mostly, possibly, generally, etc.).

Each finding will discuss one issue that leads to one or more recommendations or actions.

### APPENDIX D – Flow Chart for National Service Assessment Activities

This flow chart provides an estimated time line for the entire Service Assessment process.



## **APPENDIX E – Glossary of Terms**

**Significant Hydro-meteorological Events** - Significant hydro-meteorological events are those that directly result in at least one fatality, numerous injuries requiring hospitalization, extensive property damage, or widespread media interest. However, heat episodes with fewer than five fatalities and multiple lightning fatalities fewer than three are not considered significant hydro-meteorological events.

**Significant NWS-related Events** - NWS-related significant events include, but are not limited to, situations where there are one or more employee fatalities or injuries occurring in the line of duty; major damage to a NWS facility; civil disturbances affecting NWS employees or installations; results of terrorist acts requiring provision of weather services; toxic spills or nuclear incidents requiring the provision of hydro-meteorological services; wild fires, tsunamis, avalanches, and volcanic eruptions requiring the provision of services from the NWS; and weather-related marine and aviation accidents as defined in Directive 10-20, Forensic Services.